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ABSTRACT

The logic and methodology applied in a management science approach to performance and staff utilization in the Client Benefits (CBA) and Community Service (CSA) divisions of the Suffolk County (New York) Department of Social Services (SCDSS) are described. Using a blend of classical organization theory and management science techniques, the CBA and CSA were perceived as service delivery organizations composed of networks engaged in procedures that could be assessed for work effort and work flow. The queuing theory was used to portray the quantitative relationships between processing rate (measured in staffing) and the arrival rate of matters (measured by stations, i.e., organizational components of the divisions). A Marginal Analysis model was used to estimate the best staffing composition. Using these approaches, inferences were drawn about systems operation, and remedial operations were suggested to enhance the performance and productivity of the two sections. Expected budget constraints and the simultaneous rise in the caseloads of both divisions have made it necessary for the SCDSS to look for additional solutions beyond the scope of the study. There are four tables (23 pages) of study data and an 18-item list of references. (SLD)

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THE SUFFOLK COUNTY DEPARTMENT OF SOCIAL SERVICES PERFORMANCE STUDY

AN EXECUTIVE SUMMARY

by

David Spottheim and George R. Wilson
With a Contribution by Paul C. Libassi

The Center for Regional Policy Analysis
State University of New York
Stony Brook, New York

March 1991

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To the Supervisors who identified the stations and matters and to the staff members who recorded their work efforts and work flow patterns, thereby contributing to the initiation of this study.

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THE SUFFOLK COUNTY DEPARTMENT OF SOCIAL SERVICES PERFORMANCE STUDY*

BY
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The Center for Reg. Policy Analysis
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March 1991

AN EXECUTIVE SUMMARY

I. INTRODUCTION

The report of this study details the logic and methodological concepts behind the application of a Management Science approach to performance and staff utilization in the Client Benefits (CBA) and the Community Service (CSA) Divisions of the Suffolk County Department of Social Services (SCDSS). The CBA administers the Public Assistance Programs whereas the CSA's obligation is to provide social services. Since these service delivery entities do not share identical goals, they provide different types of services and have different operational structures. Therefore, these Divisions were analyzed separately through the application of the management science approach.

The theoretical framework behind this research study is a blend of classical organization theories and management science techniques. Hence, the Client Benefit (CBA) and Community Service (CSA) Divisions of this Department were perceived to be purposeful service delivery organizations (or firms) composed of a network of units (i.e. processing stations) which are engaged in recurrent (routinized) administrative procedures to assure the processing of a set of identifiable service and administratively related matters as mandated by the mission of these Divisions.

Since the term organization (or division) implies the existence of enduring organizational structure, administrative processes and recurrent work flow patterns [Bausky 1977], these Divisions were disaggregated into their organizational components (stations) and service-related matters processed by these stations were identified. Consequently, data concerning the work effort devoted to process a particular matter by each of the stations, and the work flow patterns of matters, along with other data, were collected and processed in conjunction with the Queueing theory and Fox's (1966) Marginal Analysis technique.

*The opinions and findings presented in this summary should not necessarily be interpreted as the views or policies of SCDSS.

These methods were chosen because they can accurately portray the structure and processes of these Divisions. Also, the said methods complement concepts advocated by classical organization theories. Subsequently, this applied research approach was used to address a major managerial predicament faced by the public sector in general, and the CBA and CSA Divisions in particular, namely:

- What is the best composition of resources that would lead to a situation whereby these service delivery systems will "produce" an anticipated or predetermined level of outputs associated with their program's mandated missions, without altering the; a) observed processing time of various matters by
their respective processing stations, b) the operational structure of these Divisions and c) the workflow pattern between their stations.

To address this managerial problem we have used management science techniques. Thus, the queueing theory was used to portray the quantitative relationships between the processing rate (measured in staffing) and the arrival rate of matters (by station). It was also used for the purpose of generating performance and productivity indices.

The Marginal Analysis model is a mathematical programming technique that was used to estimate the best staffing composition (by station) needed to realize the production (or processing) targets under alternative scenarios. In other words, we have used this technique to find the overall level of an efficiently allocated operational budget necessary to meet an administrative performance measure based on the timely disposition of service-related matters. Since this technique was used to tell us what productivity levels are attainable and what cannot be expected from the elements of these Divisions, prior and costly experimentation with alternative organizational structure and management concepts was avoided.

Finally, this management science approach was used to analyze the Divisions' productivity, inasmuch as the queueing behavior displayed by these systems precluded the application of a conventional management analysis.

II. INFORMATION GENERATED

This applied research study is based on a tested and proven methodology which has been applied while analyzing various service delivery systems [see Spottheim and Wilson 1986-1990]. Hence, descriptive, prescriptive, and productivity information regarding the systems operation were generated by this approach. Specifically, the management decision support

models, developed for this study, allowed us to generate information concerning:

- The demand for services from the CBA & CSA systems;
- The processing capacity by station;
- The time and cost of processing a given administrative or client related matter by each of the stations involved (i.e. work standards); and
- The number of matters (items) waiting to be processed by a given station along with the amount of time spent by an item (or a matter) while waiting to be processed by that station;
- Productivity indices regarding the current and latent level of staff utilization in each station;
- Backlog of work to be done found in specific stations and the corresponding waiting time along with the impact of this backlog upon the performance of the system as a whole, and upon downstream stations in particular;
- Optimal distribution of staff members across the stations of the systems;
- Estimated "production" levels (of matters) and corresponding staff requirements (by station) under alternative administrative scenarios; and
- Estimated payroll budgets under alternative financial resources constraints.

Consequently, these indices and measurements were used to draw inferences regarding the system operation and to suggest remedial actions to enhance the performance and productvity of this Division.

III. INFERENCES DRAWN

Since the operation of these Divisions is not intuitively obvious, the application of this management science approach allowed us to gain a better understanding of the systems operation. Also, this approach allowed us to address the issue of efficient utilization of workers, without tampering with the observed work standards, in particular. Inferences drawn from this and related studies are as follows:

- The queueing network behavior exhibited by these service delivery systems precludes the application of a conventional management analysis. Therefore a management science approach should be used to; a) resolve the work overburden and low work intensity problems found in certain supervisory and worker stations, b) accelerate the work flow velocity, and c) allocate the necessary resources (by station) so as to achieve a timely disposition of a given (or desired) volume of service and related administrative matters;

- Since these Divisions are composed of queueing networks of stations engaged in a sequential processing of matters, the ratios of supervisor/workers and clericals/supervisor are <u>not constant</u>. Rather these ratios are influenced by the <u>frequency</u> a matter must visit a given station and its processing complexity;

- The supervisory stations found in the CSA system in particular, are overburdened by the amount of service-related matters they must process;

- This work overload or congestion phenomenon tends to create a problem whereby the downstream stations (of the networks) are backlogged since matters are restricted from moving to them as freely as they should;

- Although numerous workers were shifted from their customary stations to busier ones, the model's solutions call for hiring <u>new</u> workers to handle the increased demand for services. Thus, the CBA needs 7.8% additional workers, whereas the CSA requires an increase of 10.4% over the Fall of 1989 staff levels;

- Due to the queueing behavior exhibited by the CBA and CSA systems, a <u>five percent reduction</u> in their Fall 1989 budget will create dramatic buildups of clients waiting for services; ...similarly, a five percent salary increase with the budget remaining at the Fall 1989 level would have almost the same effect. If the payroll budget increases by 5% to cover the increase in salary, the staffing solutions in the various scenarios remain the same;

- Since such a queue (of clients) may never dissipate in a situation of increase demand for services and a simultaneous reduction in labor forces, clients, workers and politicians alike, may find this situation intolerable;

- Being a human services delivery system, the CBA and the CSA are a labor-intensive system. Therefore, office automation would merely improve the system's "memory" rather than expediting the operation;

- Management should continue the policy of rewarding workers who; a) acquire diversified, rather than specialized skills and b) are willing to take additional responsibilities, thereby, enhancing the flexibility and consequently the efficiency of the CBA and CSA operation;

- The inter-center (and inter-bureau) mail distribution should be carried out at least four times a day, thereby "smoothing" the flow of matters between stations, and consequently minimizing the increase of the waiting time a matter must spend before being processed; and

- Vacation leave should be scheduled by staff ahead of time. It should be spread over the entire year in such a way that no more than 10% of staff members are out at any given time.

IV. THE METHODOLOGY

The quantification of the weekly operations of these Service Delivery systems, as noted above, was executed through the amalgamation of discursive social services and organizational theories, along with management science techniques. In using this approach, the CBA and CSA were perceived to be composed of two open "Queueing Networks" of stations, linked together through the recurrent flow of matters. Hence, given the observed or desired processing levels of matters per week (under alternative scenarios), the intent behind the application of Fox's (1966) Marginal Analysis Model was to determine the optimal number of workers for allocation to each of the stations. In applying this approach, an objective function and a set of resource allocation rules were embedded into the computer models to:

- Minimize the waiting time a matter must spend at a station before being processed;

- Exploit existing workers' performance flexibilities;

- Minimize the overburdened workload of busy stations; and

- Assure that the total amount of time spent by a matter in these systems is no greater than four weeks with some exceptions.

In using these rules we tried to find the overall level of an efficiently allocated operational budget necessary to meet an administrative performance measure based on the timely disposition of service-related matters. Thus, the formulated Marginal Analysis (mathematical programming) model contains an objective function, and a set of inequality constraints regarding the amount of time the various matters spent in their respective stations.

Since the average time spent by a matter at a service station is inversely proportional to the processing rate of that station, this relationship is not a linear one. Therefore, these processing (capacity) rates were estimated through the application of the queueing theory. In doing so, it was assumed that the processing capacity (rate) of a station can only be expanded by increasing the number of workers of that station. This assumption was made in concurrence with our research aim of enhancing the productivity level of this Division without tampering with the observed work standards and the operational structure of these Divisions.

To determine the optimal number of workers at each service station, interchangeable worker/supervisor classes were identified. When an additional capacity was required by a given station, the Marginal Analysis model assigned a worker whose hourly wages rate was equal to lowest rate within the class. Only enough workers were added to meet the matter's "time in the system" constraint.

While the work-standards, work flow and other data were used in conjunction with the said models to generate results, only a segment thereof is presented in this summary. Thus, the tables provided below represent a sample of analytical information upon which management can base its payroll and staffing decision and policies.

Finally, the optimal resource allocation model [Fox 1966] used in this analysis, tends to equalize the workload of the stations' and matters' waiting time through the reassignment of unbusy staff to the busiest stations. The criteria of reassignment of staff members across the CBA centers and the CSA's bureaus have been specified in the staff exchangeability matrices.

V. THE RESULTS

The application of this methodology allowed us to generate a uniform set of results (by station) concerning the efficiency aspects of the Client Benefit (CBA) and the Community Services (CSA) Divisions' operation. The former Division administers the Public Assistance and other entitlement programs, whereas the CSA's obligation is to provide social services.

Since these service delivery entities provide different types

of services, their operational structure is not identical. Therefore, these Divisions were disaggregated into their respective administrative components and their corresponding set of administrative actions taken on behalf of the clients, were identified. Consequently, information concerning these systems' operation was collected and analyzed for the purpose of ascertaining findings about the CBA and CSA performance, under alternative administrative scenarios.

For expository purposes, however, the results presented below deal only with a single scenario, namely, the optimal resource allocation (i.e. payroll budget and staffing) across the CBA and CSA's work-stations.

Thus, the tables that follow contain nine columns (A-I) of numerical findings by work-station, namely the:

A. Weekly arrival rate (of matters) to the stations for processing purposes;
B. Weekly processing rate per worker;
C. Present utilization (busyness) index;
D. Optimal utilization index;
E. Average time a matter must spend at a station before being processed (for the CSA) or average length of queue for the CBA's system;
F. Worker's grade;
G. Present staffing (by grade level);
H. Staffing after shifting; and
I. Optimal staffing.

A zero entry in columns A-C in particular, indicates that no work flow information was available (during the data collection phase) due to vacation taken by the staff of the station in question. Therefore, results found in columns D-I may also have a zero value for that station. It should be noted that the data concerning the rate of arrivals of matters to the system was collected over a period of 11 hours for the CBA and 35 hours for the CSA. During those periods of time, over 12000 service-related matters were processed at the CSA and over 7000 cases were handled at the CBA.

A. Staffing Solutions for the Restructured CBA

Although the CBA system has been restructured since the data was originally collected, it retained the obligation of administering the following programs: Public Assistance (PA), Medical Assistance (MA), Food Stamps (FS) and Heat & Electrical Assistance (HEAP).

Since the restructured CBA was not fully operational at the time of the analysis, we have decided to conduct a transitional analysis through the application of the said techniques. It was felt that the results generated by this analysis will provide management with information concerning

the expected performance of the "new" CBA system.

It should be noted, however, that unlike the CSA's stations, the restructured CBA's stations tend to specialize in the processing of a particular matter associated with the Public Assistance programs. That is to say, that a given station will process a particular matter associated with the arriving case-records of a particular program, whereas, a subsequent station will process another related matter. Because of these unique administrative processes, the CBA system was analyzed in context of its case record processing activities (by program).

To address the efficiency aspects of staff allocation, the (restructured) CBA's system (containing seven centers and the Chronic Care Unit) was disaggregated into 148 work-stations, which are identified in Table I. Also, 35 service-related matters associated with the processing of the various programs' case records were identified.

Consequently, primary work flow, work effort and other data were collected and analyzed for the purpose of deriving optimal staff allocation solutions needed to handle these type of activities. The results presented below deal with a single situation in which management wishes to know:

- The optimal distribution of required resources (weekly payroll budget and staffing) over the "new" CBA stations so as to allow them to process, efficiently, the most recent (May 1990) demand for services which is about 13% above the Fall of 1989 demand for Public Assistance Services.

The solutions for this problem were derived through the application of Fox's (1966) Marginal Analysis or resource allocation model. Resource in this instance, is composed of both staff members and the weekly payroll budget.

Since the new CBA was not fully operational at the time of the analysis, we have embedded into the model's results a "slack or pool" of workers that could be used by management to assure a smooth transition from the "old" to the "new" system. The animated results of this transitional analysis can be found in Table II.

A cursory examination of this table will reveal that 481 workers and a weekly payroll budget of $230,756 are needed to achieve a steady state operational environment, for the new system services. The optimal distribution of these workers across the centers' stations are tabulated in Col. "I" whereas the current staff distribution (by station) can be found in Col. "G" of Table II. Embedded into these results is the "pool" of workers mentioned above. These workers however were not assigned by the model to any of the stations because of

the fact that the new CBA was not operational at the time of this analysis. Rather, they are identified by grade and station, in Table II-Patchogue Center's results, inasmuch as their reassignment is a managerial rather than a research problem.

The results suggest that the (Fall 1989) weekly payroll budget of $217,777 must be increased by approximately 6% and the staff level by 8% in order to meet the 13% increase demand for services. Also, notice that these percentage increases are not identical in value, due to the non-linear relationship between them. Finally, this analysis seems to suggest that the restructured CBA is likely to be more efficient than the old one.

B. A Staffing Solution for the CSA

The CSA obligation, as was noted earlier, is to provide social services to Suffolk County eligible clients. This service delivery system is composed of three bureaus and a Central Service Unit, which were disaggregated into their respective work-stations. A total of 153 work-stations were identified as indicated in Table III. These stations are involved in the processing of 450 distinguished service and administratively related matters.

Unlike the CBA station, which tends to specialize in the processing of a particular matter, the CSA stations tend to process the same matter, sequentially. Thus, the results provided in Table IV deal with staffing levels needed by this Division to process service and administrative related matters rather than case records.

In light of the county's budgetary problems, these solutions were derived through the application of the minimum cost computational procedure. Specifically, the minimum cost solutions were ascertained through a stepwise application of the resource allocation model. For expositiory purposes, however, the results presented in this summary deal with a single situation in which management wishes to know:

- How should the minimum level of "factors of production" (weekly payroll budget and staff) be distributed over the CSA's station, so as to allow the system to process an observed weekly arrival rate of matters (observed during the Fall of 1989) efficiently.

The solutions for this scenario are tabulated by bureaus in Table IV. A cursory examination of this table will reveal that it contains nine (A-I) columns of numerical results, whose names were defined earlier. A further examination of this table will reveal that the system would require at least

424 workers and a weekly payroll budget of $246,503 in order to achieve a steady state operational environment. In contrast, this system would require over 465 workers under the conventional staff allocation practice in which an intra-bureau, rather than an inter-bureau transfer of workers is allowed. Notice that during the data collection phase (Fall 1989), the CSA staff level was 384 workers only.

Also, notice that the optimal staffing is vastly different from the present staffing. For instance, the present (i.e., Fall 1989) staffing for Station No. 15 is composed of 37 grade 19 workers, and 8 (grade 17) workers, whereas, the optimal staffing solution calls for 18 (grade 19) and 8 (grade 17) workers, therefore, 19 (grade 19) workers were transferred to other stations. Also, notice that upon transferring these 19 workers (to other stations) the optimal utilization index was raised to .988 (from the present index of .571), without affecting the average waiting time a matter must spend before being processed. This average is .049 of a week or 105 minutes. A comparison of the current utilization against the optimal indices will reveal that the latter indices have a higher value than the former. Ideally, the optimal indices should have a range of 0.55 to 0.90.

Some stations, however, have a current utilization index which is greater than one. For example, the current staffing of Station No. 20 causes congestion in that station, due to a very high present utilization index (2.343). The high value of this index implies that this station requires a staff of 8 persons, rather than the current 3 workers, to operate in a steady state operational environment.

Moreover, numerous Adult Services' stations are congested inasmuch as their current utilization index is greater than one. For instance, Station 28's present utilization index is 1.590. By hiring an additional worker, this index was reduced to .795. In this instance, it was necessary to hire a new worker inasmuch as the worker exchangeablility matrix allows for no transfer of workers to this station. In addition to these congestions, it was found that many of the Family/Child Services' stations are also congested. To remove these congestions, it was necessary to transfer and/or hire workers.

To mitigate the congestion problems, workers were transferred from stations whose utilization indices were found to be low. In fact, several stations were found to have zero arrival rate, due to insufficient work flow data. For example, Adult Services' stations, No. 48-50, show a zero arrival rate of matters, due to vacations of the staff. Hence, workers affiliated with these stations were transferred to other (congested) stations. However, these stations can be

restaffed by (management) "retransferring" workers from stations whose optimal staffing is greater than 10 persons. In other words, the system has enough "slack" to reassign workers.

C. **Ramification of the Findings**

In light of the budget deficit faced by Suffolk County, it has been suggested that the SCDSS should consider the options of: a) reducing the level of services provided to its clients, b) staff reduction which seemingly will prolong the clients' waiting time for services only and c) alleviating the staffing slack found in numerous stations whose optimal staff utilization index is below 0.30. These options, however, are infeasible due to the:

- Steady and unabated rise in the mandated programs' caseload;
- Clients', workers' and politicians' diverse perceptions regarding the consequences of these options;
- Legal regulations mandating service caseloads and clients' waiting time for services limitations;
- System's queueing behavior causing a drastic buildup of cases waiting for service due to the unabated rise in the systems' caseload; and
- Fact that the work flow data collected during the Summer/Fall 1989, may reflect a vacation season slowdown of activities; therefore, the slack level found in the systems may not be sufficient to alleviate the consequences of anticipated staffing shortage, and budget cuts.

Thus, to mitigate the unwarranted consequences of a budget reduction and the simultaneous rise in the Public Assistance and Social Services Programs' caseload [see Pear, R. in the N.Y. Times August 20, 1990], the SCDSS may have no other recourse but to consider management and staffing policies which are beyond the scope of this study.

EXESUMC

Table I
The Restructured CBA's
Centers and Corresponding Stations

I. BAY SHORE CENTER

Station Code and Name

1	Center Manager
2	Administrative Clerk
3	Eligibility Supervisor I
4	Eligibility QC Examiner I
5	Eligibility Examiners I
6	Eligibility Supervisor II
7	Elibibility QC Examiner II
8	Eligibility Examiner II
9	Eligibility Clerical Unit
10	Receptionist/Reception Examiner
11	File Room Clerk
12	Income Maintenance Supervisor I
13	Income Maintenance QC Examiners I
14	Income Maintenance Examiners I
15	Income Maintenance Supervisor II
16	Income Maintenance QC Examiner II
17	Income Maintenance Examiner II
18	Income Maintenance Clerical
19	Medicaid Supervisor
20	Medicaid QC Examiner
21	Medicaid Examiner
22	Medicaid Clerical
23	Medicaid Senior Clerk
24	Under Care Supervisor
25	Under Care QC Examiner
26	Under Care Examiner
27	Under Care Clerk
28	Housing Workers
29	Data Entry Supervisor
30	Data Entry Operator
31	CAP Worker

II. CORAM CENTER STATIONS

Station Code and Name

32	Center Manager
33	Administrative Clerk
34	Eligibility Supervisor
35	Eligibility Quality Control
36	Eligibility Interviewers
37	Eligibility Clerical
38	Receptionist
39	File Bank
40	Undercare (IM) Supervisor

Table I (Con't) The Restructured CBA

41 Undercare (IM) Quality Control
42 Undercare (IM) Examiners
43 Undercare (IM) Clerical
44 Undercare (IM) Supervisor
45 Undercare (IM) Quality Control
46 Undercare (IM) Examiners
47 Medicaid Supervisor
48 Medicaid Quality Control
49 Medicaid Examiners
50 Medicaid Clerical
51 Housing
52 Data Entry Supervisor
53 Data Entry Operators
54 Client Assistance Program

III. SMITHTOWN CENTER STATIONS

Station Code & Name

55 Center Manager
56 Administrative Clerk
57 Eligibility Supervisor
58 Eligibility QC
59 Eligibility Examiners
60 Hospital Examiner
61 Eligibility Clerks
62 Receptionist/Screener
63 Undercare (IM) Supervisors
64 Undercare (IM) QC
65 Undercare (IM) Examiners
66 Undercare (IM) Clerks
67 File Clerk
68 Supervisor Emergency Fuel
69 Emergency Fuel QC
70 Temporary Fuel Workers
71 Medicaid Supervisor
72 Medicaid QC
73 Medicaid Examiners
74 Chronic Care Examiner
75 Medicaid Clerks
76 CAP Worker
77 Housing Workers
78 Data Entry Supervisor
79 Data Entry Operators
80 Central Mail Room

IV. HUNTINGTON CENTER STATIONS

Station and Code Name

81 Center Manager

Table I (Con't) The Restructured CBA

82 Administrative Clerk
83 Eligibility Supervisor
84 Eligibility Quality Control
85 Eligibility Examiners
86 Eligibility Clerical
87 Receptionist/Screener
88 File Bank
89 Income Maintenance Supervisor
90 Quality Control Examiner
91 Income Maintenance Examiners
92 Income Maintenance Clerical
93 Income Maintenance Supervisor
94 Quality Control Examiner
95 Income Maintenance Examiners
96 Medicaid Supervisor
97 Medicaid Examiners
98 Medicaid Clerical
99 Housing Workers
100 Data Entry Supervisor
101 Data Entry Operators
102 HEAP (Emergency Fuel) Supervisor
103 HEAP Workers
104 CAP Worker

V. RIVERHEAD CENTER STATIONS

105 Center Manager
106 Administrative Clerk
107 Eligibility Supervisor
108 Quality Control Examiner
109 Eligibility Examiners
110 Eligibility Clerical
111 Reception/Screener
112 File Bank
113 Income Maintenance Supervisor I
114 Quality Control Examiner I
115 Income Maintenance Examiners
116 Income Maintenance Clerical
117 Income Maintenance Supervisor II
118 Quality Control Examiner II
119 Income Maintenance Examiners
120 Medicaid Supervisors
121 Medicaid Examiners
122 Medicaid Clerical
123 Housing Workers
124 Data Entry Supervisor
125 Data Entry Operators
126 Emergency Fuel Supervisor
127 Emergency Fuel Quality Control Examiner
128 Emergency Fuel Workers
129 CAP Worker

Table I (Con't) The Restructured CBA

VI. MASTIC CENTER STATIONS

Station Code and Name

130 Center Manager
131 Administrative Clerk
132 Eligibility Supervisor
133 Eligibility QC Examiner
134 Eligibility Examiners
135 Eligibility Clerks
136 File Bank Clerk
137 Reception/Screening
138 Medicaid Supervisor
139 Medicaid Examiners
140 Medicaid Sr. Clerk Chronic Care Maintenance
141 Medicaid Clerks
142 Undercare (IM) Supervisor
143 Undercare (IM) QC Examiners
144 Undercare (IM) Examiners
145 Undercare (IM) Clerks
146 Housing Workers
147 Data Entry Supervisor
148 Data Entry Operators
149 CAP Worker

VII. PATCHOGUE CENTER DEFUNCT

VIII. WYANDANCH CENTER

Station Code and Name

168 Center Manager
169 Administrative Clerk
170 Eligibility Supervisor
171 Eligibility Quality Control
172 Eligibility Examiners
173 Eligibility Clerical
174 Receptionist/Screener
175 File Bank
176 Income Maintenance Supervsior
177 Quality Control Examiner
178 Income Maintenance Examiners
179 Income Maintenance Clerical
180 Income Maintenance Supervsior
181 Quality Control Examiner
182 Income Maintenance Examiners
183 Medicaid Supervisor
184 Medicaid Examiner
185 Medicaid Clerical
186 Housing Workers

Table I (Con't) The Restructured CBA

187 Data Entry Supervisor
188 Data Entry Operators
189 HEAP (Emergency Fuel) Supervsior
190 HEAP Workers
191 CAP Worker

IX. CHRONIC CARE CENTER†

Station Code and Name (Tentative)	Station Name (Final)
192 Center Manager	Unit Manager
193 Administrative Cler	Supervisor (2)
194 Eligibility Supervisor I	Q.C. Examiner
195 Eligibility QC Examiner I	Examiner (10)
196 Eligibility Examiners I	Med. Max Examiner (2)
197 Eligibility Supervisor II	Sr. Clerk
198 Eligibility QC Examiner II	Clerk Typist (Admin. Clerk)
199 Eligibility Examiner II	Clerk Typist (5)
200 Eligibility Clerical Unit	
201 Receptionist/Reception Examiner	
202 File Room Clerk	
203 Income Maintenance Supervisor I	
204 Income Maintenance QC Examiner I	
205 Income Maintenance Examiners I	
206 Income Maintenance Supervisor II	
207 Income Maintenance QC Examiner II	
208 Income Maintenance Examiner II	
209 Income Maintenance Clerical	
210 Medicaid Supervisor	
211 Medicaid QC Examiner	
212 Medicaid Examiners	
213 Medicaid Clerical	
214 Medicaid Senior Clerk	
215 Under Care Supervisor	
216 Under Care QC Examiner	
217 Under Care Examiner	
218 Under Care Clerk	
219 Housing Workers	
220 Data Entry Supervisor	
221 Data Entry Operator	
222 CAP Worker	

†The "Station Code and Name (Tentative)" column indicates the set of stations used in the study; whereas, the "Station Name (Final)" column indicates the final configuration of stations within the Chronic Care Unit.

Table II

CLIENT BENEFITS STUDY

Case II Solutions

[CASE01] (NEW CBA)

NUMBER OF REQUIRED EMPLOYEES : 481

NUMBER OF PRESENT EMPLOYEES : 446 (Fall of 1989)

TOTAL REQUIRED WEEKLYPAYROLL : $ 230756.00

TOTAL PRESENT WEEKLY PAYROLL : $ 217777.00

SYSTEM OPTIMIZATION INDEX : 1262.3420

CENTER 1: BAYSHORE

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
1	79	90	.440	.880	6.4	27	2	1	1
2	216	105	.687	.687	1.0	10	1	1	1
						8	2	2	2
3	227	144	.784	.784	2.5	23	2	2	2
4	426	120	1.775	.887	6.0	19	2	2	2
						15	0	2	2
5	497	62	.789	.986	67.8	19	1	0	0
						15	9	8	8 †
6	14	48	.296	.296	.1	23	1	1	1
7	39	68	.566	.566	.7	19	1	1	1
8	361	75	.321	.963	23.5	19	4	0	0
						15	11	5	5
9	1200	159	.939	.939	12.5	8	6	6	6
						4	2	2	2
10	585	222	.527	.879	5.7	19	1	0	0
						10	1	0	0
						8	3	3	3
11	468	105	2.231	.893	6.2	8	2	5	5
12	74	149	.498	.498	.5	23	1	1	1
13	609	380	.800	.800	2.8	19	2	2	2
14	461	98	.666	.932	11.5	15	7	5	5
15	130	450	.291	.291	.1	23	1	1	1
16	239	200	.595	.595	.7	19	2	2	2
17	557	120	.581	.930	10.9	19	1	0	0
						15	7	5	5
18	706	119	.989	.989	84.0	15	0	2	2
						8	6	4	4
19	195	111	.872	.872	5.6	23	2	2	2
20	227	165	.459	.688	1.2	19	3	2	2
21	1000	101	.761	.899	5.8	19	0	2	2
						15	9	9	9
						13	4	0	0
22	344	81	1.064	.851	3.8	8	4	5	5
23	95	140	.680	.680	1.4	10	1	1	1
24	95	149	.640	.640	1.1	23	1	1	1
25	362	188	.963	.963	24.9	19	2	2	2
26	1063	140	.949	.949	15.8	19	1	1	1
						13	7	7	7

Table II Con't

CENTER 1: BAYSHORE

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
27	424	225	.941	.941	14.4	8	2	2	2
28	359	132	.682	.909	8.3	10	4	3	3
29	179	161	.558	.558	.5	11	2	2	2
30	3202	524	.764	.873	4.5	8	8	7	7
31	161	129	.312	.625	.8	10	4	2	2

†It was determined after the completion of the study that the staffing level of Examiner I, grade 15 at station 5 was 5 people, rather than 9. Since optimal staffing was found to be 8, additional workers need to be shifted into the station rather than a worker being shifted out. Thus, overall utilization of grade 15 workers should be a little higher than that indicated in this report.

Table II Con't
(Case II NEW CBA)

CENTER 2: CORAM

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
32	139	170	.818	.818	3.7	27	1	1	1
33	509	393	1.295	.648	.9	8	1	2	2
34	159	234	.681	.681	1.5	23	1	1	1
35	117	147	.797	.797	3.1	19	1	1	1
36	1176	152	.854	.961	21.7	19	3	2	2
						15	6	6	6
37	664	185	.893	.893	6.4	10	1	1	1
						8	3	3	3
38	564	330	.856	.856	4.7	19	1	1	1
						8	1	1	1
39	134	191	.706	.706	1.7	8	1	1	1
40	97	240	.405	.405	.3	23	1	1	1
41	99	135	.736	.736	2.1	19	1	1	1
42	833	192	.620	.869	4.6	15	7	5	5
43	514	96	1.072	.894	6.1	8	5	6	6
44	137	300	.457	.457	.4	23	1	1	1
45	215	245	.875	.875	6.1	19	1	1	1
46	891	132	.965	.965	24.5	15	7	7	7
47	68	102	.675	.675	1.4	23	1	1	1
48	252	249	1.014	.507	.4	19	1	1	1
						15	0	1	1
49	500	68	.907	.907	7.1	15	8	8	8
50	206	81	.842	.842	3.8	8	3	3	3
51	129	345	.188	.377	.2	10	2	1	1
52	200	261	.767	.767	2.5	15	1	1	1
53	910	668	.681	.681	1.2	8	2	2	2
54	90	98	.919	.919	10.5	10	1	1	1

Table II Con't
(Case II NEW CBA)

CENTER 3: SMITHTOWN

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
55	23	32	.730	.730	2.0	27	1	1	1
56	28	147	.193	.193	.0	10	1	1	1
57	68	260	.265	.265	.1	23	1	1	1
58	182	225	.811	.811	3.5	19	1	1	1
59	337	77	.721	.866	4.4	15	6	5	5
60	35	77	.455	.455	.4	19	1	1	1
61	209	225	.932	.932	12.9	8	1	1	1
62	60	66	.457	.914	9.8	15	1	0	0
						8	1	1	1
63	107	81	.657	.657	1.0	23	2	2	2
64	177	140	.629	.629	.8	19	2	2	2
65	844	92	.826	.908	6.9	19	1	0	0
						15	10	10	10
66	1114	345	.808	.808	2.6	8	4	4	4
67	71	41	1.690	.845	4.2	8	1	2	2
68	32	120	.269	.269	.1	19	1	1	1
69	44	155	.287	.287	.1	15	1	1	1
70	39	180	.043	.217	.1	0	5	1	1
71	14	87	.163	.163	.0	23	1	1	1
72	55	72	.774	.774	2.7	19	1	1	1
73	350	102	.572	.858	4.3	15	6	4	4
74	42	87	.490	.490	.5	19	1	1	1
75	92	77	.394	.592	.6	8	3	2	2
76	61	117	.524	.524	.6	10	1	1	1
77	145	165	.295	.884	6.8	15	1	0	0
						10	2	1	1
78	333	408	.818	.273	.0	0	1	3	3
79	3826	743	.735	.857	3.8	11	1	0	0
						8	6	6	6
80	160	75	.703	.703	1.2	9	1	1	1
						8	2	2	2

Table II Con't
(Case II NEW CBA)

CENTER 4: HUNTINGTON

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
81	9	33	.280	.280	.1	27	1	1	1
82	29	56	.517	.517	.6	10	1	1	1
83	213	245	.866	.866	5.6	23	1	1	1
84	85	182	.466	.466	.4	19	1	1	1
85	255	93	.454	.907	8.1	15	6	3	3
86	152	78	.645	.967	28.2	8	3	2	2
87	234	326	.717	.717	1.8	15	1	1	1
88	7	38	.182	.182	.0	8	1	1	1
89	49	183	.270	.270	.1	23	1	1	1
90	158	195	.812	.812	3.5	19	1	1	1
91	293	90	.543	.815	2.7	15	6	4	4
92	149	111	.448	.672	1.1	8	3	2	2
93	35	62	.563	.563	.7	23	1	1	1
94	72	144	.500	.500	.5	19	1	1	1
95	296	75	.658	.987	73.2	15	6	4	4
96	7	162	.044	.044	.0	23	1	1	1
97	74	581	.032	.128	.0	15	4	1	1
98	21	105	.101	.203	.1	8	2	1	1
99	117	96	.612	.612	.7	10	2	2	2
100	191	230	.833	.833	4.2	12	1	1	1
101	427	366	.582	.582	.6	8	2	2	2
102	16	98	.166	.166	.0	19	1	1	1
103	126	204	.311	.311	.1	0	2	2	2
104	17	62	.276	.276	.1	15	1	1	1

Table II Con't
(Case II. NEW CBA)

CENTER 5: RIVERHEAD

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
105	3	35	.101	.101	.0	27	1	1	1
106	140	170	.824	.824	3.9	10	1	1	1
107	142	318	.447	.447	.4	23	1	1	1
108	21	117	.181	.181	.0	19	1	1	1
109	387	113	.685	.856	4.2	19	2	1	1
						15	3	3	3
110	469	147	1.065	.799	2.4	6	3	4	4
111	235	249	.945	.945	16.3	15	1	1	1
112	116	101	1.155	.578	.6	6	1	2	2
113	116	204	.573	.573	.8	23	1	1	1
114	189	99	1.898	.949	17.1	19	1	1	1
						15	0	1	1
115	648	110	.981	.981	49.7	19	2	2	2
						15	4	4	4
116	1085	491	.552	.737	1.5	10	1	0	0
						6	2	2	2
						4	1	1	1
117	28	53	.526	.526	.6	21	1	1	1
118	174	207	.842	.842	4.5	19	1	1	1
119	523	117	.894	.894	6.4	19	1	1	1
						15	4	4	4
120	71	98	.717	.717	1.8	23	1	1	1
121	81	68	.296	.592	.6	15	4	2	2
122	157	93	.837	.837	3.9	10	1	1	1
						6	1	1	1
123	277	245	.377	.565	.5	10	3	2	2
124	211	228	.926	.926	11.6	15	1	1	1
125	856	638	.671	.671	1.1	11	1	1	1
						8	1	1	1
126	14	75	.189	.189	.0	19	1	1	1
127	21	177	.120	.120	.0	0	1	1	1
128	0	113	0.000	0.000	0.0	0	1	1	1
129	49	90	.552	.552	.7	10	1	1	1

Table II Con't
(Case II NEW CBA)

CENTER 6: MASTIC

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
130	85	117	.728	.728	2.0	27	1	1	1
131	373	420	.888	.888	7.1	10	1	1	1
132	40	141	.285	.285	.1	23	1	1	1
133	124	147	.848	.848	4.7	19	1	1	1
134	539	114	.939	.939	13.2	15	5	5	5
135	197	140	.701	.701	1.4	8	2	2	2
136	97	92	1.056	.528	.4	8	1	2	2
137	344	255	.675	.675	1.1	15	1	1	1
						8	1	1	1
138	28	279	.102	.102	.0	23	1	1	1
139	46	210	.055	.220	.1	15	4	1	1
140	7	360	.020	.020	.0	10	1	1	1
141	95	111	.432	.864	5.5	8	2	1	1
142	154	167	.917	.917	10.1	23	1	1	1
143	110	120	.459	.917	10.1	19	2	1	1
144	1432	189	.842	.947	15.0	19	1	1	1
						15	8	7	7
145	1151	296	1.296	.972	32.6	8	3	4	4
146	195	230	.425	.850	4.8	10	2	1	1
147	578	600	.964	.964	25.7	15	1	1	1
148	1196	630	.950	.950	17.5	8	2	2	2
149	18	30	.604	.604	.9	10	1	1	1

Table II: Con't
(NEW CBA)

CENTER 7: PATCHOGUE - DEFUNCT (STAFF TRANSFERRED TO OTHER CTRS.)

*ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS**	I OPT STAFF
150	0	102	0.000	0.000	0.0	27	1	1	
151	0	386	0.000	0.000	0.0	10	1	1	
152	0	104	0.000	0.000	0.0	23	1	1	
153	0	86	0.000	0.000	0.0	19	2	0	
						15	2	1	
154	0	155	0.000	0.000	0.0	8	3	1	
155	0	192	0.000	0.000	0.0	19	1	1	
156	0	137	0.000	0.000	0.0	8	1	1	
157	0	348	0.000	0.000	0.0	23	1	1	
158	0	227	0.000	0.000	0.0	19	2	1	
159	0	162	0.000	0.000	0.0	15	7	1	
160	0	104	0.000	0.000	0.0	8	1	1	
161	0	264	0.000	0.000	0.0	23	1	1	
162	0	185	0.000	0.000	0.0	15	3	1	
163	0	192	0.000	0.000	0.0	8	3	1	
164	0	83	0.000	0.000	0.0	10	2	1	
165	0	225	0.000	0.000	0.0	15	1	0	
						11	1	1	
166	0	273	0.000	0.000	0.0	8	1	1	
167	0	29	0.000	0.000	0.0	10	1	1	

*The corresponding old stations' number and name of this defunct center are listed in Table II, p. 26A-5, of the Final Report.

** Slack or pool of workers that can be used by management to assure a smooth transition from the old to new CBA system.

Table II Con't

CENTER 8: WYANDANCH

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
168	9	33	.280	.280	.1	27	1	1	1
169	40	56	0.000	.710	1.7	15	0	1	1
170	213	249	0.000	.855	5.1	19	0	1	1
171	121	185	0.000	.655	1.2	15	0	1	1
172	383	93	0.000	.817	2.6	15	0	4	4
						10	0	1	1
173	248	78	0.000	.787	2.1	8	0	4	4
174	319	326	0.000	.977	41.6	15	0	1	1
175	7	38	0.000	.182	.0	8	0	1	1
176	71	183	0.000	.386	.2	19	0	1	1
177	71	90	0.000	.789	2.9	15	0	1	1
178	518	92	0.000	.929	10.6	19	0	1	1
						15	0	5	5
179	277	111	0.000	.835	3.6	8	0	3	3
180	42	62	0.000	.676	1.4	19	0	1	1
181	126	144	0.000	.880	6.5	15	0	1	1
182	436	75	0.000	.970	29.2	19	0	1	1
						15	0	1	1
						10	0	4	4
183	21	165	0.000	.129	.0	19	0	1	1
184	149	165	0.000	.904	8.5	15	0	1	1
185	120	66	0.000	.914	9.3	8	0	2	2
186	171	102	1.681	.841	4.0	10	1	1	1
						8	0	1	1
187	358	230	0.000	.779	2.4	12	0	2	2
188	344	366	.940	.940	14.6	8	1	1	1
189	16	98	.166	.166	.0	17	1	1	1
190	160	204	.785	.392	.1	15	1	0	0
						0	0	2	2
191	24	62	0.000	.389	.2	15	0	1	1

CENTER 9: CHRONIC CARE †

ST #	A ARRIV RATE #/WK	B SERVI RATE #/WK	C PRSNT UTIL	D OPT UTIL	E AVE # IN QUEUE	F WORKER GRADE	G PRSNT STAFF	H STAFF AFTER SHIFTS	I OPT STAFF
192	46	102	0.000	.452	.4	27	0	1	1
193	156	111	0.000	.704	1.4	8	0	2	2
194	39	204	0.000	.191	.0	19	0	1	1
195	14	111	0.000	.128	.0	15	0	1	1
196	267	66	0.000	.811	2.5	15	0	3	3
						10	0	2	2
197	8	51	0.000	.160	.0	19	0	1	1
198	14	83	0.000	.169	.0	15	0	1	1
199	194	68	0.000	.942	14.4	15	0	3	3
200	648	159	0.000	.811	2.5	4	0	5	5
201	315	122	0.000	.855	4.4	15	0	2	2
						8	0	1	1
202	53	144	0.000	.370	.2	8	0	1	1
203	14	177	0.000	.080	.0	19	0	1	1
204	114	380	0.000	.302	.1	15	0	1	1
205	174	53	0.000	.807	2.5	15	0	3	3
						10	0	1	1
206	17	354	0.000	.050	.0	19	0	1	1
207	24	62	0.000	.389	.2	15	0	1	1
208	31	111	0.000	.288	.1	15	0	1	1
209	172	83	0.000	.685	1.0	8	0	3	3
210	129	45	0.000	.962	23.8	19	0	3	3
211	56	167	0.000	.338	.2	15	0	1	1
212	337	66	0.000	.852	3.6	15	0	4	4
						10	0	2	2
213	390	81	0.000	.964	24.6	8	0	5	5
217	606	140	0.000	.866	4.4	13	0	5	5
219	204	117	0.000	.875	5.7	8	0	2	2
220	21	48	0.000	.444	.4	11	0	1	1
221	1825	615	0.000	.989	91.3	8	0	3	3
222	92	129	0.000	.716	1.8	15	0	1	1

†Due to the fact that the Chronic Care Unit was not in operation at the time of the study, a certain proportion of all MA activity was allocated to a Chronic Care Unit for an "animated" study of the proposed unit. The data indicated that a variety of services needed to be provided to the MA population; thus, the "Center" organizational structure and staffing was indicated. Subsequently, the Chronic Care Unit organization was finalized and is different from that used in the study. However, activities done by stations not in the final list must be accomplished elsewhere in the system and the analysis offered in this study indicates the workload imposed on the system as a whole by activity of the stations in the Chronic Care Unit.

Table III
The CSA's Bureaus & Corresponding Stations

I. BUREAU OF CHILD PROTECTIVE SERVICES

Station Code and Name

1 Director
2 Secretary to the Director
3 Assistant Director
4 Community Organization Specialist
5 Supervisor Intake
6 Clerical/Secretarial/Intake
7 Community Service Workers/Intake
8 Case Work Intake
9 Supervisor of Response
10 Secretary to Supervisor - Response
11 Case Workers/Response
12 Institution Case Worker
13 Supervisor - Field
14 Secretary - Field
15 Case Workers - Field
16 Court Worker - Field
17 Community Service Worker
18 Supervisor of Service Delivery
19 Senior Caseworker (Court)
20 Senior Caseworker
21 Case Workers
22 Community Service Worker
23 Clerk/Typist/Senior Sten. Svc. Delivery
24 Emergency Services Supervisor
25 Case Workers Emergency Services
26 Clerks Emergency Services
27 Soc. Welfare Examiners Emergency Services

II. BUREAU OF ADULT SERVICES

Station Code and Name

28 Director
29 Secretary to the Director
30 Assist. Director Response Ref.
31 Assist. Director Adult Home
32 Secretary to Assist. Director
33 Supervisor Intake
34 Intake Workers
35 Intake Secretary
36 Brookhaven Service Team Sup.
37 Secretary BST
38 Case Workers BST
39 Community Service BST
40 Islip/Smithtown Service Sup.
41 Secretary IST

Table III Con't

42	Case Workers	IST
43	Community Services	IST
44	Babylon & Huntington Team Supervisor	
45	Secretary	BHST
46	Case Workers	BHST
47	Community Services	BHST
48	Riverhead Service Team Supervisor	
49	Secretary	RST
50	Case Workers	RST
51	Community Service	RST
52	Adult Home Unit Supervisor	
53	Adult Home Unit Secretary	
54	Adult Home Unit Case Workers	
55	Conservatorship/Court Liaison Supervisor	
56	Conservatorship/Court Liaison Secretary	
57	Conservatorship/Case Worker	
58	Conservatorship/Community Service Worker	

III. BUREAU OF CENTRAL OFFICES

Station Code and Name

59	Administrator
60	Secretary
61	Senior Case Workers
62	Supervisor of Contracts
63	Secretary of Contracts
64	Contract Workers
65	Mgmt. Systems Supervisor
66	Secretary
67	Case Worker
68	Supervisor Resource Development
69	Secretary
70	Case Workers
71	Community Service Workers
72	Supervisor Homemakers
73	Mgmt. Systems/Clerical
74	Secretary Homemakers
75	Case Workers
76	Community Service Workers
77	Homemakers
78	Word Proc. Supervisor
79	Clerk Typists
80	Assistant to the Administrator
81	Community Organization Spec.
82	Neighborhood Aid
83	Domestic Violence Coordinator
84	Emergency Preparedness Officer
151	Assistant Administrator
152	Secretary to the Assistant Administrator
153	Assistant Secretary (M.S.)

Table III Con't

IV. BUREAU OF FAMILY/CHILD SERVICES

Station Code and Name			
85	Director		
86	Secretary		
87	Assistant Director I		
88	Secretary to Assistant Director I		
89	Supervisor Preventive/Intake	Team 009	E
90	Secretary to Supervisor	Team 009	E
91	Senior Class Worker Preventive	Team 009	E
92	Case Workers Preventive	Team 009	E
93	Senior Case Worker Preventive	Team 009	E
94	Supervisor	Team 008	W
95	Secretary	Team 008	W
96	Senior Case Worker	Team 008	W
97	Case Workers	Team 008	W
98	Case Review Supervisor	Team 019	
99	Secretary Case Review	Team 019	
100	Adoption Superv. Court Prep.	Team 020	
101	Adoption Secretary	Team 020	
102	Adoption Senior Case Worker	Team 020	
103	Adoption Case Workers	Team 020	
104	Secretary Court Prep.	Team 020	
105	Senior Case Worker Term. Parent Rights		
106	Senior Case Worker Foster Care Review		
107	Senior Case Worker Adoption Voluntaries		
108	Teenage Services Act Supervisor		
109	Teenage Services Act Secretary		
110	Teenage Services Act Case Workers		
111	DAS Senior Case Worker		
112	Supervisor Day Care	Team 023	
113	Secretary Day Care	Team 023	
114	Senior Case Workers Day Care		
115	Case Workers Day Care		
116	Assistant Director II		
117	Secretary to Assist. Director II		
118	Supervisor/Foster	Team 010	
119	Secretary/Foster	Team 010	
120	Senior Case Worker	Team 010	
121	Case Workers	Team 010	
122	Supervisor	Team 011	
123	Secretary	Team 011	
124	Senior Case Worker	Team 011	
125	Case Workers	Team 011	
126	Supervisor	Team 012	
127	Secretary	Team 012	
128	Senior Case Worker	Team 012	
129	Case Workers	Team 012	
130	Supervisor	Team 013	
131	Secretary	Team 013	

Table III Con't

132	Senior Case Worker	Team 013
133	Case Workers	Team 013
134	Alt. to Ins. Plcmt.	Team 013
135	Supervisor	Team 014
136	Secretary	Team 014
137	Senior Case Worker	Team 014
138	Case Workers	Team 014
139	Supv. Residential/Indep. Living	Team 015
140	Secr. Residential/Indep. Living	Team 015
141	Sr. Case Wkr. Residen./Indep. Lvng	Team 015
142	Sr. Case Wkr. Residen./Indep. Lvng	Team 015
143	Case Wkr. Residen./Ind. Living	Team 015
144	Ctr. Mgr./Non-Svs. 4E/MA	Team 019
145	Case Wkr./Adoption Subsidy	Team 020
146	Secretary	Team 019
147	Administrator II	Transportation Unit
148	Sr. Acct. Clerk	Transportation Unit
149	Clerk	Transportation Unit
150	Community Svs. Worker	Transportation Unit

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Table IV

COMMUNITY SERVICES STUDY

CASE08

NUMBER OF REQUIRED EMPLOYEES : 424
NUMBER OF PRESENT EMPLOYEES : 384 (Fall of 1989)
TOTAL REQUIRED WEEKLYPAYROLL : $ 246503.00
TOTAL PRESENT WEEKLY PAYROLL : $ 221698.00 (1989)

SYSTEM OPTIMIZATION INDEX : 10.5863

BUREAU: CHILD PROTECTIVE SERVICES

ST #	ARRIV RATE #/WK	SERVI RATE #/WRK/WK	PRSNT UTIL	OPT UTIL	AVE WAIT WK	WORKER GRADE	PRSNT STAFF	STAFF AFTER SHIFTS	OPT STAFF
1	26	63	.410	.410	.011	29	1	1	1
2	104	57	0.000	.911	.086	8	0	2	2
3	172	115	.500	.750	.011	26	3	2	2
4	56	84	.671	.671	.024	25	1	1	1
5	47	100	.473	.473	.009	23	1	1	1
6	168	160	.350	.525	.002	8	3	2	2
7	177	118	.746	.746	.011	10	2	2	2
8	33	41	.398	.796	.094	19	2	1	1
9	23	59	.198	.396	.011	23	2	1	1
10	149	160	.466	.932	.085	8	2	1	1
11	466	58	.617	.891	.012	19	13	9	9
12	9	13	.690	.690	.163	21	1	1	1
13	333	114	.363	.969	.087	23	8	3	3
14	293	109	.671	.895	.023	10	4	3	3
15	1602	62	.571	.988	.049	19	37	18	18
						17	5	5	5
						17	3	3	3
16	153	52	.369	.983	.358	21	8	3	3
17	168	85	.327	.981	.305	10	6	2	2
18	160	64	.497	.828	.021	23	5	3	3
19	170	41	.815	.815	.015	21	5	5	5
20	409	58	2.343	.879	.011	21	3	8	8
21	904	43	.743	.991	.120	19	28	21	21
22	139	66	.423	.705	.009	10	5	3	3
23	222	108	.227	.682	.005	10	5	3	3
						8	4	0	0
24	26	38	.685	.685	.057	23	1	1	1
25	47	32	.210	.736	.037	21	6	1	1
						19	1	1	1
26	35	116	.152	.304	.004	8	2	1	1
27	205	134	.381	.763	.010	19	1	1	0
						15	3	3	2

BUREAU: ADULT SERVICES

ST #	ARRIV RATE #/WK	SERVI RATE #/WRK/WK	PRSNT UTIL	OPT UTIL	AVE WAIT WK	WORKER GRADE	PRSNT STAFF	STAFF AFTER SHIFTS	OPT STAFF
28	101	64	1.590	.795	.027	29	1	2	2
29	213	88	1.199	.799	.012	13	1	1	1
						8	1	2	2
30	68	29	2.325	.775	.030	26	1	3	3
31	71	45	1.571	.786	.036	26	1	2	2
32	82	68	1.215	.607	.009	10	1	2	2
33	243	188	1.290	.645	.004	23	1	2	2
34	778	64	1.209	.930	.012	21	6	6	6
						19	4	7	7
35	118	89	1.318	.659	.009	8	1	2	2
36	108	81	1.342	.671	.010	23	1	2	2
37	123	89	1.372	.686	.010	10	1	2	2
38	336	52	1.281	.915	.024	21	1	1	1
						19	4	6	6
39	68	62	1.098	.549	.007	4	1	2	2
40	7	29	.242	.242	.011	23	1	1	1
41	56	125	.452	.452	.007	10	1	1	1
42	231	37	1.547	.884	.022	19	4	7	7
43	85	35	2.398	.799	.030	10	1	3	3
44	182	123	1.474	.737	.010	23	1	2	2
46	288	51	1.394	.929	.037	21	1	1	1
						19	3	5	5
47	87	69	1.268	.634	.010	10	1	2	2
48	0	0	0.000	0.000	0.000	23	1	0	0
49	0	0	0.000	0.000	0.000	10	1	0	0
50	0	0	0.000	0.000	0.000	21	1	0	0
						19	3	0	0
51	2	90	.013	.026	.000	10	1	0	0
						4	1	1	1
52	56	27	2.058	.686	.018	23	1	3	3
53	54	73	.743	.743	.040	10	1	1	1
54	267	44	1.199	.999	5.202	21	1	1	1
						19	4	5	5
55	33	27	1.211	.605	.021	23	1	2	2
56	47	46	1.025	.513	.008	8	1	2	2
57	104	22	2.331	.932	.111	21	2	5	5
58	26	21	1.197	.598	.026	10	1	2	2

BUREAU: CENTRAL OFFICES

ST #	ARRIV RATE #/WK	SERVI RATE #/WRK/WK	PRSNT UTIL	OPT UTIL	AVE WAIT WK	WORKER GRADE	PRSNT STAFF	STAFF AFTER SHIFTS	OPT STAFF
59	4	48	.099	.099	.002	34	1	1	1
60	4	72	.066	.066	.001	10	1	1	1
61	61	25	.613	.817	.049	21	4	3	3
62	75	39	.957	.957	.273	23	2	2	2
63	35	41	.852	.852	.138	10	1	1	1
64	71	63	.559	.559	.007	23	1	1	1
						20	1	1	1
65	40	58	.691	.691	.038	23	1	1	1
66	16	30	.552	.552	.041	8	1	1	1
67	56	30	.465	.930	.210	19	4	2	2
68	54	74	.730	.730	.036	23	1	1	1
69	68	64	1.058	.529	.006	8	1	2	2
70	78	35	.440	.733	.019	19	5	3	3
71	66	40	.813	.813	.048	10	2	2	2
72	7	88	.080	.080	.001	23	1	1	1
73	224	44	.717	.836	.013	10	1	0	0
						8	6	6	6
74	49	77	.643	.643	.023	10	1	1	1
75	87	140	.624	.624	.012	21	1	1	1
76	42	44	.957	.957	.498	10	1	1	1
77	80	13	1.155	.962	.284	7	5	6	6
78	56	85	.668	.668	.024	14	1	1	1
79	246	60	.815	.815	.010	8	5	5	5
80	44	30	1.473	.737	.039	29	1	2	2
81	42	35	1.195	.598	.016	25	1	2	2
82	18	32	.592	.592	.045	13	1	1	1
83	75	103	.729	.729	.026	24	1	1	1
84	0	0	0.000	0.000	0.000	16	1	1	0
151	18	24	0.000	.788	.154	31	1	1	1
152	35	60	0.000	.586	.023	13	1	1	1
153	68	69	0.000	.987	1.106	8	1	1	1

BUREAU: FAMILY/CHILD SERVICES

ST #	ARRIV RATE #/WK	SERVI RATE #/WRK/WK	PRSNT UTIL	OPT UTIL	AVE WAIT WK	WORKER GRADE	PRSNT STAFF	STAFF AFTER SHIFTS	OPT STAFF
85	59	27	2.174	.725	.024	31	1	3	3
86	146	115	1.273	.636	.006	8	1	2	2
87	71	47	1.482	.741	.025	26	1	2	2
88	35	31	1.144	.572	.016	10	1	2	2
89	130	92	1.406	.703	.011	23	1	2	2
90	194	167	1.155	.578	.003	10	1	2	2
91	108	74	1.453	.727	.015	21	1	2	2
92	262	51	1.717	.858	.015	19	3	6	6
93	66	63	1.038	.519	.006	21	1	2	2
94	175	167	1.045	.522	.002	23	1	2	2
95	49	66	.746	.746	.044	10	1	2	1
96	21	28	.736	.736	.097	21	1	1	1
97	340	47	1.185	.889	.016	19	6	8	8
98	217	54	1.335	.801	.010	23	3	5	5
99	33	54	.604	.604	.028	10	1	1	1
100	80	71	1.124	.562	.006	23	1	2	2
101	16	30	.548	.548	.040	8	1	1	1
102	56	24	2.341	.780	.038	21	1	3	3
103	59	14	2.098	.839	.056	19	2	5	5
104	35	30	1.183	.592	.018	10	1	2	2
105	40	33	1.214	.607	.018	21	1	2	2
106	16	30	.552	.552	.041	21	1	1	1
107	30	38	.789	.789	.096	21	1	1	1
110	59	109	0.000	.539	.011	19	0	1	1
111	0	0	0.000	0.000	0.000	21	1	0	0
112	47	40	1.179	.590	.013	23	1	2	2
113	0	0	0.000	0.000	0.000	8	1	0	0
114	66	44	1.506	.753	.030	21	1	2	2
115	246	39	1.044	.895	.025	19	6	7	7
116	33	17	1.865	.932	.375	26	1	2	2
117	33	41	.789	.789	.089	10	1	1	1
118	75	84	.896	.896	.102	23	1	1	1
119	120	114	1.058	.529	.003	8	1	2	2
120	59	73	.803	.803	.055	21	1	1	1
121	203	40	1.688	.844	.016	19	3	6	6
122	14	41	.339	.339	.012	23	1	1	1
123	7	22	0.000	.322	.022	8	0	1	1
124	59	28	2.091	.697	.019	21	1	3	3

Table IV Con't

ST #	ARRIV RATE #/WK	SERVI RATE #/WRK/WK	PRSNT UTIL	OPT UTIL	AVE WAIT WK	WORKER GRADE	PRSNT STAFF	STAFF AFTER SHIFTS	OPT STAFF
125	208	33	3.151	.900	.031	19	2	7	7
126	40	37	1.065	.533	.010	23	1	2	2
127	47	48	.986	.986	1.477	8	1	1	1
128	75	38	1.959	.980	.612	21	1	2	2
129	144	21	1.666	.952	.118	19	4	7	7
130	130	132	.979	.979	.346	23	1	1	1
131	73	154	.475	.475	.006	10	1	1	1
132	16	44	.375	.375	.014	21	1	1	1
133	132	41	1.068	.801	.018	19	3	4	4
134	73	65	1.125	.563	.007	19	1	2	2
135	56	79	.714	.714	.031	23	1	1	1
136	28	108	.262	.262	.003	8	1	1	1
137	54	50	1.068	.534	.008	21	1	2	2
138	262	48	1.350	.900	.025	19	4	6	6
139	73	56	1.295	.647	.013	23	1	2	2
140	92	68	1.343	.671	.012	10	1	2	2
141	23	15	1.578	.789	.110	21	1	2	2
142	66	53	1.249	.625	.012	21	1	2	2
143	563	36	1.910	.955	.030	19	8	16	16
144	14	90	.158	.158	.002	27	1	1	1
145	118	85	1.388	.694	.011	19	1	2	2
146	21	24	.868	.868	.267	8	1	1	1
147	52	30	1.709	.855	.089	25	1	2	2
148	30	30	.998	.998	17.465	13	1	1	1
149	40	29	1.354	.677	.028	8	1	2	2
150	196	12	3.780	.945	.067	10	4	16	16

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